

Arizona Water Protection Fund
Application Cover Page
FY 2017

Title of Project: River Restoration Through Hazardous Fuels and Invasive Species Removal											
Type of Project: <input checked="" type="checkbox"/> Capital or Other <input type="checkbox"/> Water Conservation <input type="checkbox"/> Research	Stream Type: <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral										
Your level of commitment to maintenance of project benefits and capital improvements: <input checked="" type="checkbox"/> < 5 years <input type="checkbox"/> 5-10 years <input type="checkbox"/> 11-15 years <input type="checkbox"/> 16-20 years											
Applicant Information: Name/Organization: Gila Watershed Partnership Address 1: P.O. Box 1614 Address 2: City: Thatcher State: Arizona ZIP Code: 85552 Phone: 928-322-8449 Fax: Tax ID No.: 86-0917031											
Inside an AMA: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, which AMA: <input type="checkbox"/> Phoenix <input type="checkbox"/> Tucson <input type="checkbox"/> Prescott <input type="checkbox"/> Pinal <input type="checkbox"/> Santa Cruz											
Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation											
Contact Person: Name: Kelly Fuller Title: Executive Director Phone: 928-322-8449 Fax: e-mail: kelly@gwpaz.org											
Any Previous AWPf Grants: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide Grant #(s): 08-115WPF, 11-174WPF, 14-183WPF											
Arizona Water Protection Fund Grant Amount Requested: \$94,903.00 If the application is funded, will the Grantee intend to request an advance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Matching Funds Obtained and Secured: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Applicant/Agency/Organization:</u></th> <th style="text-align: right; border-bottom: 1px solid black;"><u>Amount (\$):</u></th> </tr> </thead> <tbody> <tr> <td>1. Applicant</td> <td style="text-align: right;">5,000.00</td> </tr> <tr> <td>2. Federal & State Agencies</td> <td style="text-align: right;">27,759.00</td> </tr> <tr> <td>3. Organizations/Foundations</td> <td style="text-align: right;">60,451.00</td> </tr> <tr> <td style="text-align: right;">Total:</td> <td style="text-align: right;">93,210.00</td> </tr> </tbody> </table>	<u>Applicant/Agency/Organization:</u>	<u>Amount (\$):</u>	1. Applicant	5,000.00	2. Federal & State Agencies	27,759.00	3. Organizations/Foundations	60,451.00	Total:	93,210.00
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1. Applicant	5,000.00										
2. Federal & State Agencies	27,759.00										
3. Organizations/Foundations	60,451.00										
Total:	93,210.00										
Has your legal counsel or contracting authority reviewed and accepted the Grant Award Contract General Provisions? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A											
Signature of the undersigned certifies understanding and compliance with all terms, conditions and specifications in the attached application. Additionally, signature certifies that all information provided by the applicant is true and accurate. The undersigned acknowledges that intentional presentation of any false or fraudulent information, or knowingly concealing a material fact regarding this application is subject to criminal penalties as provided in A.R.S. Title 13. The Arizona Water Protection Fund Commission may approve Grant Awards with modifications to scope items, methodology, schedule, final products and/or budget.											
Kelly Fuller	Executive Director (928) 322-8449										
Typed Name of Applicant or Applicant's Authorized Representative	Title and Telephone Number										
Signature	Date Signed										

Gila Watershed Partnership - Executive Summary

Project: River Restoration through Hazardous Fuels and Invasive Species Removal

The Gila Watershed Partnership of Arizona (GWP) respectfully submits this request for funding from the Arizona Water Protection Fund for the restoration of 100 acres of riparian forests on the Upper Gila River. GWP is a public-private, multi-stakeholder partnership, working closely with landowners to mitigate the effects of dense infestations of invasive plants, improve riparian habitat, and restore native vegetation and riparian function in the watershed.

Tamarisk (*Tamarix spp.*) has established dense, monotypic forests throughout the riparian corridor, out-competing native plant species, increasing wildfire frequency/intensity, and altering terrestrial and aquatic wildlife habitat. As a response to this infestation, the tamarisk leaf beetle (*Diorhabda spp.* – henceforth “TLB”) was released as a biocontrol agent to defoliate and limit tamarisk invasions which will further degrade riparian habitat. Researchers estimate that TLB will arrive in the Upper Gila in 1-2 years. Once TLB arrives, the vast stands of tamarisk will turn into a field of match sticks waiting to burn. Currently this landscape is inhabited by the endangered southwestern willow flycatcher (SWFL) and many migratory bird species that depend on breeding sites located in the Upper Gila. This area is one of the most productive breeding sites for SWFL remaining in Arizona. SWFL site fidelity is strong, with greater than 2/3 of individuals returning to the same site to breed each year. These changes in habitat composition and burning frequency put SWFL and other species at great risk by removing the vegetative cover that protects wildlife from predators.

GWP is working closely with a variety of public and private partners to secure the necessary funding to implement riparian restoration throughout the Gila River corridor. This proposed project is an important component of this effort. Long-term (over the next five years) adaptive management, monitoring, and maintenance are supported by GWP’s organizational capacity and science-based protocols. GWP completed an ecohydrological assessment (Orr et al 2014) to determine high and medium priority sites. Permits covering Section 401 and 404 of the Clean Water Act were initially acquired for 55 acres of private land in the Gila Valley and have been re-issued for an additional 355 acres of federal and private land. Between February 11 and April 14, 2016, mechanical removal and herbicide treatments on tamarisk were successfully completed on 60 acres of critical habitat.

Our proposed project will build on these efforts by restoring 100 more acres over two years. We will contract with the Arizona Conservation Corps (AZCC), Stillwater Sciences, and Arizona Department of Forestry & Fire Management’s Fort Grant Wildland Fire Crew to complete removal efforts. AZCC will provide training and skills-building to crews of underserved and at-risk youth to safely and effectively control tamarisk and revegetate with site-appropriate species. Stillwater Sciences will help develop best management practices and guide permitting and compliance. The Fort Grant Wildland Fire Crew will provide job training and working opportunities for the incarcerated to assist in mechanical tamarisk removal.

Healthier and more resilient riparian systems benefit wildlife, water resources, and Arizonans. With support from AWPf, this project will promote functioning riparian areas, increase water availability by reducing demand from dense tamarisk forests, reduce risks to landowners relating to flooding and wildfire, protect and enhance wildlife habitat, and provide a replicable example for similar efforts around the state.

Gila Watershed Partnership - Project Overview

Project: River Restoration Through Hazardous Fuels and Invasive Species Removal

Background

The Gila Watershed Partnership (GWP) was founded in 1992 to improve the condition of the Upper Gila Watershed. Since its inception, GWP has been successful in implementing over \$8 million in projects and programs to improve water quality, conserve water, improve riparian habitat, and improve the function of the river. GWP's success has, in large part, been due to the strong working relationships it has developed with state and federal agencies, community organizations, educational institutions, local governments, businesses, and local citizens. In 2014 GWP gained significant organizational capacity with the addition of a conservation-oriented staff consisting of a Restoration Horticulturalist, a Restoration Specialist, and a Program Coordinator.

The Riparian Restoration Framework for the Upper Gila River was completed in 2014, providing comprehensive, science-based guidance for restoration efforts within the river corridor. Invasive species removal and restoration of riparian areas within the watershed has long been a high priority for GWP. The invasive species of greatest concern is tamarisk (*Tamarix spp.*), or "salt-cedar". Tamarisk was introduced to the Gila Valley early in the 20th century for erosion control. It now dominates the riparian corridors and has changed the hydrologic form and function of the Gila River. Land managers and local officials are eager to eradicate it because of its association with loss of native habitat and increased surface soil salinity in an area already plagued with high salinity.

Tamarisk presents a significant threat to wildlife including our threatened and endangered species. The primary threat to the endangered southwestern willow flycatcher (SWFL) is the loss, modification, and fragmentation of primary breeding habitat. Threats of defoliation by the tamarisk leaf beetle (*Diorhabda spp.* – henceforth "TLB") will further exacerbate this issue. River channelization, losses of tall overstory species (e.g. cottonwood), and habitat fragmentation have led to the listing of the western yellow-billed cuckoo as threatened. By removing invasive tamarisk, natural stream function may be restored by allowing waters to flow across the floodplain, rather than confining waters and continuing to incise the river channel. Tamarisk forests increase roughness in the floodplain, pushing water out from the river channel during high flow events and keeping it from re-entering causing flooding issues in adjacent lands. In comparison, native riparian forests are less dense and allow high flows to pass through the floodplain unimpeded. Removing tamarisk also helps to remove great amounts of hazardous fuels from a system not adapted to frequent fires. Once we establish native riparian vegetation on our project sites, they will act as propagule islands for neighboring and downstream areas, linking the restoration sites together through passive revegetation, rejoining previously fragmented critical habitat, and allowing for system recovery after the TLB colonize our river.

Goals

For riparian restoration in the Upper Gila Watershed, GWP believes that there are synergistic ecologic, economic, social, and management goals that can simultaneously benefit the environment and the community. Watershed-wide riparian restoration is viewed by GWP as a comprehensive approach to improve the overall quality of the environmental resources in the Upper Gila River system. This includes enhancing water quality and quantity, and improving the functioning of the riparian zone to meet the societal and environmental needs of the area.

The primary, direct goal of this project is to control invasive and exotic species that have degraded the quality and quantity of critical habitat and water resources on 100 acres in the Gila River riparian corridor. Control measures will include mechanical removal of tamarisk and herbicide treatments. Riparian restoration of these treated areas will include planting with native, less water-intensive plant

communities. Secondary, indirect goals of the project include increasing employment opportunities for youth and contractors in the Upper Gila Watershed, mitigating against risks from wildfires, educating the community on watershed issues, improving scenic value by increasing sight distance along state and county roads, and mitigating economic losses due to flooding.

Objectives

To achieve the goals for this project, the GWP will utilize a collaborative, science-based approach that incorporates the knowledge and priorities of landowners, land managers (federal, state, and local agencies), stakeholders, and scientific professionals. This interdisciplinary approach has six basic objectives:

- 1) Through mechanical methods, remove standing tamarisk biomass from 100 acres of riparian habitat to restore wildlife habitat and reduce wildfire risks.
- 2) Safely apply the appropriate herbicides to tamarisk and other exotic and invasive species to limit re-growth and secondary invasions.
- 3) Revegetate sites with native plants propagated at the Gila Native Plant Nursery. Targeted species include but are not limited to cottonwood, willow, sacaton, hackberry, and milkweed.
- 4) Contract with local businesses and other non-profits to promote community participation in restoration activities and engage at-risk or underserved Arizona youth.
- 5) Employ adaptive management practices to ensure efficient and effective implementation of re-establishing self-sustaining native riparian communities.
- 6) Share lessons learned from the project with other communities and practitioners to improve the understanding of riparian restoration in Arizona.

Statement of Problems, Causes, and Proposed Solutions

Healthy, functioning riparian areas provide critically important habitat and watershed services, including recharging groundwater, filtering runoff, moderating ambient and water temperatures, providing habitat for resident and migratory wildlife, stabilizing soils and reducing erosion. As described above, dense stands of mature tamarisk now dominate the proposed treatment sites (and the majority of the riparian areas on the Upper Gila River corridor). Salt tolerant and fire adapted, tamarisk alters soil chemistry, drastically reduces biodiversity, and its dense network of roots cause sediment aggradation over time, altering channel morphology and interfering with the natural functioning of the riparian buffer.

With the impending arrival of TLB, widespread defoliation over multiple seasons is likely to occur, converting standing tamarisk to dry biomass - increasing wildfire risk, and further degrading habitat. Therefore, it has become imperative to proactively treat tamarisk, reduce biomass, and revegetate with native plant species at prioritized restoration sites.

The GWP believes that the long-term solution to the problem is two-fold: 1) treatment and revegetation of the proposed priority riparian areas with support from AWPf and matching contributions from partners 2) treatment of additional portions of the river corridor over time, and a strong public engagement and education component made possible by our conservation staff will ensure long-term monitoring and maintenance of these sites.

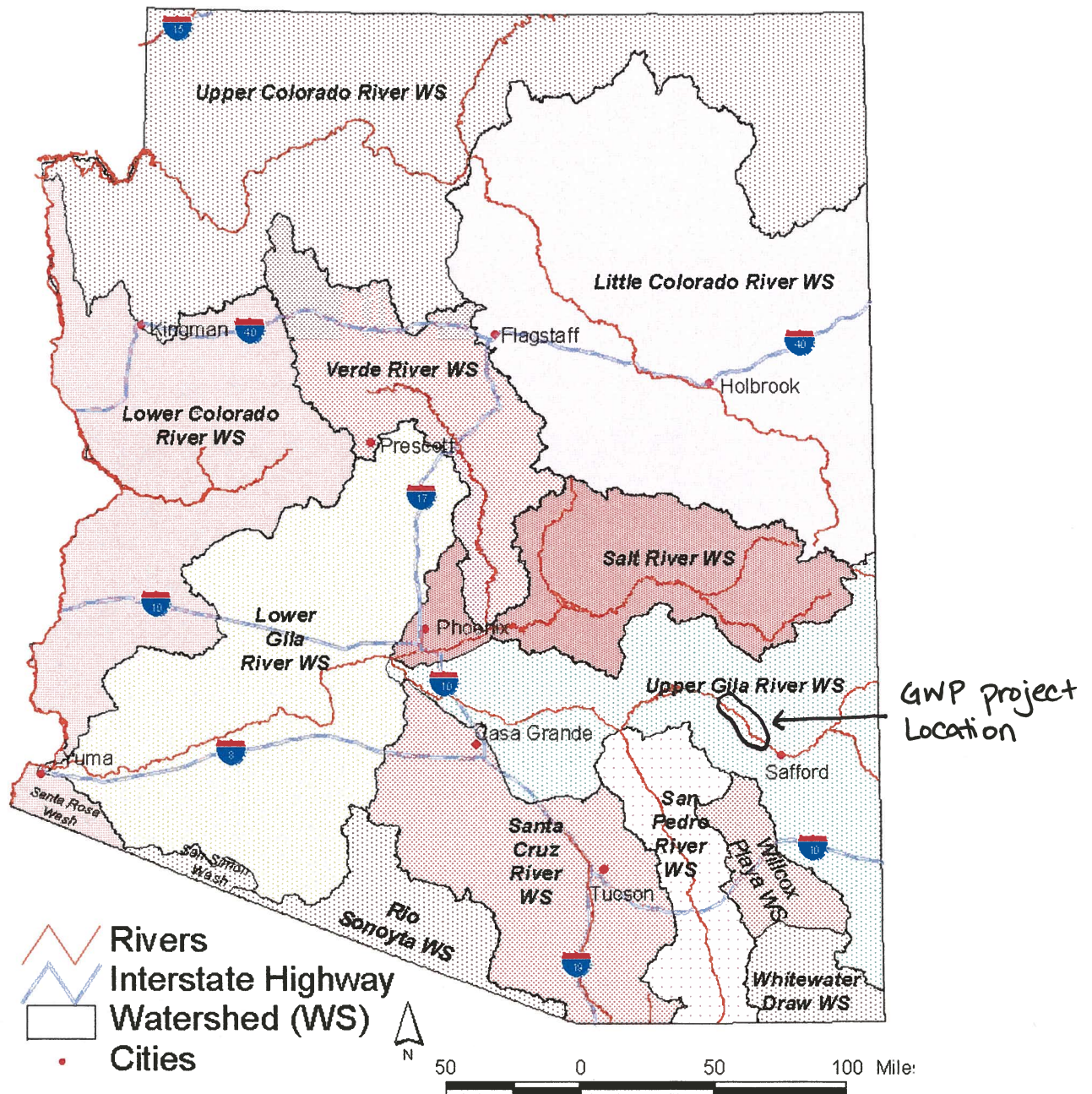
Statement of Project Years of Benefit to the Resource and General Public: 20 years +

With a 24-year history, core staff, Board, and multi-agency steering committee, we anticipate many years of project monitoring and maintenance of the riparian resource. Restored riparian buffers will result in improved water quality by reducing sediment loads from washing directly into the river, and by improving water filtration processes. Replacing dense stands of tamarisk with less-water-intensive plant communities will improve water conservation and mitigate against natural disasters. Wildlife will benefit from improved habitat, and local communities, landowners, and future generations of Arizonans will benefit from healthy, diverse, functioning riparian areas on the Gila River.

Project Location & Environmental Contaminant Information FY 2017

Project Location Information			
1. County: <u>Graham</u>	2. Section: <u>18</u>	3. Township: <u>5S</u>	4. Range: <u>24E</u>
<p>5. Watershed: <u>Gila</u></p> <p>6. 8 or 10 Digit Hydrologic Unit Code (HUC): <u>H15040005</u></p> <p>7. Name of USGS Topographic Map where project area is located: <u>Pima, Eden, Fort Thoman, Geronimo</u></p> <p>8. State Legislative District: <u>14</u> (Information available at: http://azredistricting.org/districtlocator/)</p> <p>9. Land ownership of project area: <u>Private: Colvin, Larson, Squire; Corporations: Freeport-McMoRan Inc, Langley-Eden Farms, ; Federal: Bureau of Land Management.</u></p> <p>10. Current land use of project area: <u>Grazing, recreation, personal use, and retired agriculture.</u></p> <p>11. Size of project area (in acres): <u>100</u></p> <p>12. Stream Name: <u>Gila River</u></p> <p>13. Length of stream through project area: <u>~25 miles</u></p> <p>14. Miles of stream benefited: <u>~50 miles</u></p> <p>15. Acres of riparian habitat: <u>100 acres</u> will be:</p> <div style="margin-left: 400px;"> <input type="checkbox"/> Enhanced <input type="checkbox"/> Maintained <input checked="" type="checkbox"/> Restored <input type="checkbox"/> Created </div>			
<p>16. General description and/or delineation for the area of impact of the project within the watershed. There are seven sites being impacted by this project, with a total of 100 acres to be restored. These sites are all within Graham County, adjacent to the Gila River, and are in the riparian corridor. These sites were selected due to the high density of invasive tamarisk.</p> <p>17. Provide directions to the project site from the nearest city or town. List any special access requirements: Each site is 10-30 miles west of Safford, AZ along the Gila River. Site access has been or is in process of being granted from each landowner. Most sites are on the southern bank of the river and can be accessed off State Highway 70, others can be accessed off River Road along the northern bank.</p>			
Environmental Contaminant Location Information			
<p>1. Does your project site contain known environmental contaminants? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants:</p> <p>2. Are there known environmental contaminants in the project vicinity? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants:</p> <p>3. Are you asking for Arizona Water Protection Fund monies to identify whether or not environmental contaminants are present? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>			

Arizona Watershed Map FY 2017



Title of Project: River Restoration Through Hazardous Fuels and Invasive Species Removal
Location: (UTM's and Tnshp./Sect./Range) 12N 601080.2E 3649533.5N
Section 18, Township 5S, Range 24E

Gila Watershed Partnership - Scope of Work 2017-2018

Project: River Restoration through Hazardous Fuels and Invasive Species Removal

Task 1: Acquire Permits, Authorizations, Clearances, and Agreements

Task Description: GWP has acquired all the necessary permits, authorizations, clearances, and agreements necessary to complete the work described in the proposal; which includes:

- 1) Clean Water Act Section 404 permit from US Army Corps of Engineers,
- 2) Arizona State Historic Preservation Office clearance,
- 3) Endangered Species Act Section 7 consultation with US Fish & Wildlife Service,
- 4) Section 401 of the Clean Water Act permit (Arizona Department of Environmental Quality),
- 5) Arizona Department of Environmental Quality Pesticide General Permit and filing of Notice of Intent,
- 6) Open Burn permit from Arizona Department of Environmental Quality, and
- 7) Access agreements between Grantee and Landowners.

Task Purpose/Objective: To comply with all local, state, and federal permit requirements, environmental laws, and obtain legal access to project areas

Deliverable Description: Copies of all approved permits, authorizations, clearances, and agreements

Responsible Personnel: Stillwater Sciences and Gila Watershed Partnership

Deliverable Due Date: Prior to any ground disturbing activities on project sites

Reimbursable Cost: \$0

Task 2: Create Implementation Plan, Monitoring Plan

Task Description: GWP staff with partner collaboration have created plans to implement the restoration project and to monitor the restoration efforts once complete.

Task Purpose/Objective: Plan for best practices for restoration implementation, plan for adaptive management through monitoring practices.

Deliverable Description: Upper Gila Riparian Restoration Plan

Responsible Personnel: Gila Watershed Partnership

Deliverable Due Date: Plan has been included in grant supporting documents on USB drive.

Reimbursable Cost: \$0

Task 3: Implement Riparian Restoration Plan

Task Description: Based upon previous studies and ongoing monitoring efforts, invasive species removal/treatment and revegetation will occur in strategic, high-potential sites. Project actions may include, but are not limited to:

- 1) Tamarisk mastication with the use of an excavator and mulching head,
- 2) Cutting of tamarisk trees/shrubs with chainsaws,
- 3) Herbicide application to cut stumps,
- 4) Herbicide foliar application to re-sprouts and secondary weeds,
- 5) Controlled pile-burning of un-masticated woody debris,
- 6) Pole-planting of native tree species (willows and cottonwoods),
- 7) Hand-planting of container stock propagated at the Gila Native Plant Nursery (bunch grasses, pollinator species, and shrubs),
- 8) Broadcast seeding of native seed mixes, and
- 9) Ensure risk management policies are followed.

Task Purpose/Objective: To control exotic and invasive species which pose fire and flood risk. Re-establish a native, self-sustaining riparian ecosystem.

Deliverable Description: Photos, maps, data, and field tours (if requested) of project implementation

sites

Responsible Personnel: Gila Watershed Partnership, Boulder Creek, Fort Grant Fire Crew, Arizona Conservation Corps.

Deliverable Due Date: The end of the second field season (anticipated: December 31, 2018)

Reimbursable Cost: \$70,739 (Includes 5% administrative costs)

Task 4: Apply Monitoring Plan

Task Description: GWP will collect data to help explain the environmental processes occurring as a result of the restoration activities. Monitoring efforts may include but are not limited to:

- 1) Monitoring piezometers to measure depth to groundwater on project sites,
- 2) Required protocol surveys for threatened and endangered species prior to, and after restoration work occurs,
- 3) Monitoring planted vegetation to track plant survival and health,
- 4) Repeat photography at designated photo points,
- 5) Monitoring for tamarisk resprouts,
- 6) Natural recruitment of native vegetation
- 7) Herbicide application records, and
- 8) Site mapping.

Task Purpose/Objective: To track and assess the success of the project

Deliverable Description: Formal reports summarizing vegetative responses and bird (SWFL & WYBC) population abundance and distribution data collected between January 2017 and December 2018

Responsible Personnel: Gila Watershed Partnership, Arizona Conservation Corps, Stillwater Sciences

Deliverable Due Date: Annually on December 31

Reimbursable Cost: \$16,936 (Includes 5% administrative costs)

Task 5: Conduct Education and Outreach Events

Task Description: To engage the public, practitioners, and the scientific community, GWP will conduct a multi-faceted education and outreach program that may include, but is not limited to:

- 1) A media campaign that reaches out to local and regional news outlets,
- 2) Participating in local events to further engrain GWP and our goals into the community ethos,
- 3) Coordinating and facilitating multiple volunteer events to encourage citizens to actively participate in conservation activities, and
- 4) Presenting lessons learned at local and regional meetings and conferences to encourage translation of tried methodology to similarly stressed riparian systems

Task Purpose/Objective: To cultivate community support for GWP, and improve the community connection to natural resources in the Upper Gila Watershed

Deliverable Description: Copies of all news media articles, powerpoint presentations, descriptions and/or photos from educational and outreach events, and summary of community volunteer participation in restoration activities

Responsible Personnel: Gila Watershed Partnership, Community

Deliverable Due Date: At the end of the proposed project period (December 31, 2018)

Reimbursable Cost: \$3,817 (includes 5% administrative costs)

Task 6: Prepare Final Report and Presentation

Task Description: GWP shall prepare and submit a comprehensive final report consistent with Arizona Water Protection Fund policies and guidelines. This report will include, but is not limited to:

- 1) A summary of project activities,
- 2) A discussion of successes and challenges faced, and

3) A conclusion relaying lessons learned

Task Purpose/Objective: To document whether project objectives were efficiently and effectively executed. This report shall include a summary of each objective outlined within this application, as well as a budgetary summary.

Deliverable Description: The final report will summarize all methods used, the outcomes of all tasks, a summary/analysis of all monitoring data, suggested amendments to the Restoration Plan, evaluation of project success in comparison to outlined objectives, and project photos. Presentation or site visit demonstrating project accomplishments.

Responsible Personnel: Gila Watershed Partnership

Deliverable Due Date: December 31, 2018

Reimbursable Cost: \$3,411 (includes 5% administrative costs)

Gila Watershed Partnership - Key Personnel

Project: River Restoration through Hazardous Fuels and Invasive Species Removal

Staff:

Kelly Fuller is the Executive Director for the Gila Watershed Partnership. She has more than a decade of conservation experience, including work for Voyagers National Park Association, The Desert Protective Council, and American Bird Conservancy. Her graduate research focused on Mary Hunter Austin, an early 20th century author who wrote about the Mojave, Sonoran, and Chihuahuan deserts. Fuller's current focus is on strengthening GWP's operational systems, thereby increasing its capacity to produce successful watershed improvement projects.

Shawn Stone is the Restoration Specialist with the Gila Watershed Partnership and is the project lead. He came to the GWP from Harris Environmental Group to lead work on the Upper Gila Riparian Restoration Project. His previous experience with restoring degraded lands in Arizona give him the skills and understanding necessary to carry out this multifaceted project. He studied Environmental Policy & Management at Ohio State University and did his graduate work at the University of Arizona in Rangeland Management and Restoration Ecology.

Rachel More-Hla provides a variety of invaluable services to the organization as Program Coordinator. Rachel has a Bachelor's degree in Wildlife Conservation and Management from the University of Arizona, and experience conducting a variety of plant and animal surveys. Her experience with wildlife is instrumental in shaping to our multi-species based approach to restoration.

Justin Johnson is the Restoration Horticulturist with the Gila Watershed Partnership. His passion for working outdoors was instilled at a young age growing up on an organic farm in South Dakota. Johnson earned a Bachelor's degree from the University of South Dakota and followed that with 4 years of conservation field work. After leading youth conservation crews on restoration projects across the country he joined the GWP in the summer of 2014. He currently manages the Gila Native Plant Nursery in partnership with Eastern Arizona College and the Bureau of Land Management.

Contractors:

Arizona Conservation Corps is a local branch of AmeriCorps and a program of Conservation Legacy. AZCC and the youth crews they recruit will be key participants in this project. AZCC is focused on connecting youth, young adults and recent era military veterans with conservation service work projects. Their programs promote personal growth, experiential learning and an ethic of natural resource stewardship while incorporating the guiding principles of community, dedication, challenge, integrity and FUN.

Stillwater Sciences specializes in managing and implementing watershed assessment and restoration planning programs. Their technical expertise includes riparian and wetland plant ecology, vegetation mapping, surveys for special-status plants and noxious weeds, and jurisdictional wetland delineation. Stillwater has been a partner in planning and permitting this project since 2012.

Boulder Creek is a local contractor in Safford, Arizona. They will be contracted to operate and transport GWP's excavator. The excavator will be used to masticate tamarisk down to stumps.

Arizona Department of Forestry & Fire Management's Fort Grant Wildland Fire Crew will be contracted to reduce hazardous fuels through chainsaw work and prescribed fires.

**Gila Riparian Restoration Project
Detailed Budget Breakdown**

Task 1: Acquire Permits, Authorizations, Clearances, and Agreements				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
					\$0.00
					\$0.00
<i>Personnel Subtotal</i>				\$0.00	\$0.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
				\$0	\$0
<i>Partner Expenses Subtotal</i>				\$0	\$0
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
				\$0.00	\$0.00
<i>Direct Expenses Subtotal</i>				\$0.00	\$0.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
<i>Capital Outlay & Equipment Subtotal</i>				\$0.00	
TASK SUBTOTAL				\$0.00	\$0.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$0.00	\$0.00
<i>Administrative Subtotal</i>				\$0.00	\$0.00
TASK TOTAL				\$0.00	\$0.00

Task 2: Create Implementation Plan, Monitoring Plan				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
					\$0.00
					\$0.00
					\$0.00
<i>Personnel Subtotal</i>				\$0.00	\$0.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
<i>Partner Expenses Subtotal</i>				\$0.00	\$0.00
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
				\$0.00	\$0.00
<i>Direct Expenses Subtotal</i>				\$0.00	\$0.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
<i>Capital Outlay & Equipment Subtotal</i>				\$0.00	\$0.00
TASK SUBTOTAL				\$0.00	\$0.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$0.00	\$0.00
<i>Administrative Subtotal</i>				\$0.00	\$0.00
TASK TOTAL				\$0.00	\$0.00

Task 3: Implement Riparian Restoration Plan				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Specialist - Gila Watershed Partnership	220	Hours	\$29.54	\$6,499.00	\$12,998.00

Program Coordinator - Gila Watershed Partnership	110	Hours	\$29.54	\$3,249.00	\$6,498.00
Restoration Interns - Gila Watershed Partnership	400	Hours	\$13.23	\$5,292.00	\$10,584.00
Restoration Horticulturist - Gila Watershed Partnership	110	Hours	\$29.54	\$3,249.00	\$6,543.00
Personnel Subtotal				\$18,290.00	\$36,624.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
Contract Labor - Arizona Conservation Corps	1450	Hours	\$22.08	\$32,021.00	\$64,042.00
Contract Labor - Fort Grant Wildland Fire Crew	800	Hours	\$12.50	\$10,000.00	\$20,000.00
Contract Machine Operator - Boulder Creek	90	Hours	\$33.00	\$2,970.00	\$5,940.00
Partner Expenses Subtotal				\$44,991.00	\$89,982.00
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
Office supplies, printing, software.	2	Each	\$20.00	\$40.00	\$80.00
Direct Expenses Subtotal				\$40.00	\$80.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Supplies					\$0.00
Herbicide Supplies, hand tools, PPE	1	Each	\$200.00	\$200.00	\$400.00
Vehicle and Machinery Maintenance	1	Each	\$800.00	\$800.00	\$1,030.00
Vehicle Fuel	1	Each	\$500.00	\$500.00	\$700.00
Machinery Fuel	1	Each	\$750.00	\$750.00	\$1,000.00
Native Plant Materials					\$0.00
Gila Native Plant Nursery - Plant materials	100	Plants	\$10.00	\$1,000.00	\$3,000.00
Restoration Equipment					\$0.00
Fuel Tank/Tool Box	1	Each	\$800.00	\$800.00	\$1,050.00
					\$0.00
Capital Outlay & Equipment Subtotal				\$4,050.00	\$7,180.00
TASK SUBTOTAL				\$67,370.00	\$133,865.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$3,369.00	\$4,752.00
Administrative Subtotal				\$3,369.00	\$4,752.00
TASK TOTAL				\$70,739.00	\$138,618.00

Task 4: Apply Monitoring Plan				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Specialist - Gila Watershed Partnership	60	Hours	\$29.54	\$1,772.00	\$3,544.00
Program Coordinator - Gila Watershed Partnership	40	Hours	\$29.54	\$1,182.00	\$2,364.00
Restoration Interns - Gila Watershed Partnership	50	Hours	\$13.23	\$662.00	\$1,324.00
Restoration Horticulturist - Gila Watershed Partnership	40	Hours	\$29.54	\$1,182.00	\$2,364.00
Personnel Subtotal				\$4,797.00	\$9,595.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
Contract Ecologist - Stillwater Science	20	Hours	\$120.00	\$2,400.00	\$3,600.00
Contract Labor - Arizona Conservation Corps	400	Hours	\$22.08	\$8,832.00	\$17,664.00
Partner Expenses Subtotal				\$11,232.00	\$21,264.00
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
Office supplies, printing, clipboards, rebar caps, flagging, ect.	1	Each	\$100.00	\$100.00	\$200.00
Direct Expenses Subtotal				\$100.00	\$200.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
					\$0.00
Capital Outlay & Equipment Subtotal				\$0.00	\$0.00
TASK SUBTOTAL				\$16,129.00	\$31,059.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$806.00	\$1,227.00
Administrative Subtotal				\$806.00	\$1,227.00
TASK TOTAL				\$16,936.00	\$32,286.00

Task 5: Conduct Education and Outreach Events				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Specialist - Gila Watershed Partnership	15	Hours	\$29.54	\$443.00	\$886.00
Executive Director - Gila Watershed Partnership	20	Hours	\$39.61	\$792.00	\$1,584.00
Program Coordinator - Gila Watershed Partnership	20	Hours	\$29.54	\$591.00	\$1,182.00
Restoration Interns - Gila Watershed Partnership	5	Hours	\$13.23	\$66.00	\$132.00
Restoration Horticulturist - Gila Watershed Partnership	15	Hours	\$29.54	\$443.00	\$886.00
Personnel Subtotal				\$2,335.00	\$4,670.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
Community Volunteers (In-Kind)	400	Hours	\$0.00	\$0.00	\$5,000.00
Partner Expenses Subtotal				\$0.00	\$5,000.00
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
Facilities rentals, marketing materials, printing, conference & event materials.	3	Each	\$100.00	\$300.00	\$300.00
Direct Expenses Subtotal				\$300.00	\$300.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
Travel					\$0.00
Mileage & per diem for outreach events, conferences, and project meetings.	5	Each	\$200.00	\$1,000.00	\$1,200.00
Capital Outlay & Equipment Subtotal				\$1,000.00	\$1,200.00
TASK SUBTOTAL				\$3,635.00	\$11,170.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$182.00	\$374.00
Administrative Subtotal				\$182.00	\$374.00
TASK TOTAL				\$3,817.00	\$11,545.00
Task 6: Prepare Final Report				Arizona Water Protection Fund	Total Budget
I. Direct Labor Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Specialist - Gila Watershed Partnership	10	Hours	\$29.54	\$295.00	\$590.00
Executive Director - Gila Watershed Partnership	5	Hours	\$39.61	\$198.00	\$396.00
Program Coordinator - Gila Watershed Partnership	10	Hours	\$29.54	\$295.00	\$590.00
Personnel Subtotal				\$789.00	\$1,577.00
II. Outside Services Costs	Amount	Unit	Cost Per Unit	Total	
Contract Ecologist - Stillwater Science	20	Hours	\$120.00	\$2,400	\$3,600.00
Partner Expenses Subtotal				\$2,400	\$3,600
III. Other Direct Costs	Amount	Unit	Cost Per Unit	Total	
Office supplies, postage, printing, ect.	3	Each	\$20.00	\$60.00	\$120.00
Direct Expenses Subtotal				\$60.00	\$120.00
IV. Capital Outlay & Equipment Costs	Amount	Unit	Cost Per Unit	Total	
Restoration Equipment					\$0.00
					\$0.00
Capital Outlay & Equipment Subtotal					\$0.00
TASK SUBTOTAL				\$3,249.00	\$5,297.00
V. Administrative Costs	Amount	Unit	Cost Per Unit	Total	
Administrative Costs (5%)				\$162.00	\$367.00
Administrative Subtotal				\$162.00	\$367.00
TASK TOTAL				\$3,411.00	\$5,664.00
TOTAL AWPFP REQUEST					\$94,903
Total Project Budget					\$188,113

Task 3: Implement Riparian Restoration Plan													Request % Of Total Budget						
I. Direct Labor Costs				Amount Unit	Cost Per Unit	Total	Arizona Water Protection Fund	Walton Family Foundation	USFWS - Partners Program	Arizona Conservation Corps	Fort Grant Fire Crew	Bureau of Land Management	Community In-Kind	Total Budget					
Restoration Specialist - Gila Watershed Partnership				220 Hours	\$29.54	\$6,499.00		\$6,499.00	\$0.00			\$0.00		\$12,998.00					
Program Coordinator - Gila Watershed Partnership				110 Hours	\$29.54	\$3,249.00		\$3,249.00	\$0.00			\$0.00		\$6,498.00					
Restoration Interns - Gila Watershed Partnership				400 Hours	\$13.23	\$5,292.00		\$0.00	\$0.00			\$5,292.00		\$10,584.00					
Restoration Horticulturist - Gila Watershed Partnership				110 Hours	\$29.54	\$3,249.00		\$0.00	\$0.00			\$3,294.00		\$6,543.00					
Personnel Subtotal				Amount Unit	Cost Per Unit	Total		\$9,748.00	\$0.00		\$0.00	\$8,586.00	\$0.00	\$36,624.00	49.94%				
II. Outside Services Costs				Amount Unit	Cost Per Unit	Total													
Contract Labor - Arizona Conservation Corps				1450 Hours	\$22.08	\$32,021.00		\$0.00	\$0.00	\$32,021.00	\$8,000.00			\$64,042.00					
Contract Labor - Fort Grant Wildland Fire Crew				800 Hours	\$12.50	\$10,000.00		\$0.00	\$2,000.00					\$20,000.00					
Contract Machine Operator - Boulder Creek				90 Hours	\$33.00	\$2,970.00		\$0.00	\$2,970.00					\$5,940.00					
Partner Expenses Subtotal				Amount Unit	Cost Per Unit	Total		\$0.00	\$4,970.00	\$32,021.00	\$8,000.00	\$0.00	\$0.00	\$89,982.00	50.00%				
III. Other Direct Costs				Amount Unit	Cost Per Unit	Total													
Office supplies, printing, software.				2 Each	\$20.00	\$40.00		\$40.00	\$0.00		\$0.00		\$0.00	\$80.00	50.00%				
Direct Expenses Subtotal						\$40.00		\$40.00	\$0.00				\$0.00	\$80.00					
IV. Capital Outlay & Equipment Costs				Amount Unit	Cost Per Unit	Total													
Restoration Supplies														\$0.00					
Herbicide Supplies, hand tools, PPE				1 Each	\$200.00	\$200.00			\$200.00					\$400.00					
Vehicle and Machinery Maintenance				1 Each	\$800.00	\$800.00			\$230.00					\$1,030.00					
Vehicle Fuel				1 Each	\$500.00	\$500.00			\$200.00					\$700.00					
Machinery Fuel				1 Each	\$750.00	\$750.00			\$250.00					\$1,000.00					
Native Plant Materials														\$0.00					
Gila Native Plant Nursery - Plant materials				100 Plants	\$10.00	\$1,000.00			\$2,000.00					\$3,000.00					
Restoration Equipment														\$0.00					
Fuel Tank/Tool Box				1 Each	\$800.00	\$800.00			\$250.00					\$1,050.00					
Capital Outlay & Equipment Subtotal						\$4,050.00		\$0.00	\$3,140.00	\$32,021.00	\$8,000.00	\$0.00	\$0.00	\$71,880.00	56.41%				
TASK SUBTOTAL						\$67,370.00		\$9,788.00	\$8,100.00		\$8,000.00	\$8,586.00	\$0.00	\$133,865.00	50.33%				
V. Administrative Costs				Amount Unit	Cost Per Unit	Total													
Administrative Costs (5%)						\$3,369.00		\$979.00	\$405.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,752.00	70.88%				
Administrative Subtotal						\$3,469.00		\$979.00	\$405.00	\$32,021.00	\$8,000.00	\$8,586.00	\$0.00	\$44,752.00	51.03%				
TASK TOTAL						\$70,739.00		\$10,767.00	\$8,505.00					\$138,618.00					
Task 4: Apply Monitoring Plan															Request % Of Total Budget				
I. Direct Labor Costs							Amount Unit	Cost Per Unit	Total	Arizona Water Protection Fund	Walton Family Foundation	USFWS - Partners Program	Arizona Conservation Corps	Fort Grant Fire Crew	Bureau of Land Management	Community In-Kind	Total Budget		
Restoration Specialist - Gila Watershed Partnership							60 Hours	\$29.54	\$1,772.00		\$1,772.00							\$3,544.00	
Program Coordinator - Gila Watershed Partnership							40 Hours	\$29.54	\$1,182.00		\$1,182.00							\$2,364.00	
Restoration Interns - Gila Watershed Partnership							50 Hours	\$13.23	\$662.00		\$0.00				\$662.00			\$1,324.00	
Restoration Horticulturist - Gila Watershed Partnership							40 Hours	\$29.54	\$1,182.00		\$0.00				\$1,182.00			\$2,364.00	
Personnel Subtotal							Amount Unit	Cost Per Unit	Total		\$4,797.00	\$2,954.00	\$0.00	\$0.00	\$1,844.00	\$0.00	\$9,595.00	50.00%	
II. Outside Services Costs							Amount Unit	Cost Per Unit	Total										
Contract Ecologist - Stillwater Science							20 Hours	\$120.00	\$2,400.00		\$1,200.00			\$8,832				\$3,600.00	
Contract Labor - Arizona Conservation Corps							400 Hours	\$22.08	\$8,832.00		\$0			\$8,832.00	\$0.00		\$0.00	\$17,664	
Partner Expenses Subtotal							Amount Unit	Cost Per Unit	Total		\$11,232.00	\$1,200.00	\$0.00	\$8,832.00	\$0.00	\$0.00	\$0.00	\$21,264.00	52.82%
III. Other Direct Costs							Amount Unit	Cost Per Unit	Total										
Office supplies, printing, clipboards, rebar caps, flagging, ect.							1 Each	\$100.00	\$100.00				\$100.00					\$200.00	

<i>Direct Expenses Subtotal</i>					\$60.00	\$60.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$120.00	50.00%
IV. Capital Outlay & Equipment Costs		Amount	Unit	Cost Per Unit	Total								\$0.00	
Restoration Equipment													\$0.00	
<i>Capital Outlay & Equipment Subtotal</i>						\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	#D1V/0?
TASK SUBTOTAL						\$3,239.00	\$2,048.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,297.00	61.34%
V. Administrative Costs		Amount	Unit	Cost Per Unit	Total								\$367.00	
Administrative Costs (5%)					\$162.00	\$205.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$367.00	44.23%
<i>Administrative Subtotal</i>					\$162.00	\$205.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$367.00	
TASK TOTAL						\$3,411.00	\$2,253.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,664.00	60.23%
TOTAL AWP/F REQUEST					\$94,903	Walton Family Foundation	USFWS - Partners Program	Arizona Conservation Corps	Fort Grant Fire Crew	Bureau of Land Management	Community In-Kind	Total Budget	\$188,113.00	Request % Of Total Budget
Match Totals						\$19,598.00	\$8,820.00	\$40,853.00	\$8,000.00	\$10,939.00	\$5,000.00			50.45%

Gila Watershed Partnership - Narrative for Access Permission

Project: River Restoration through Hazardous Fuels and Invasive Species Removal

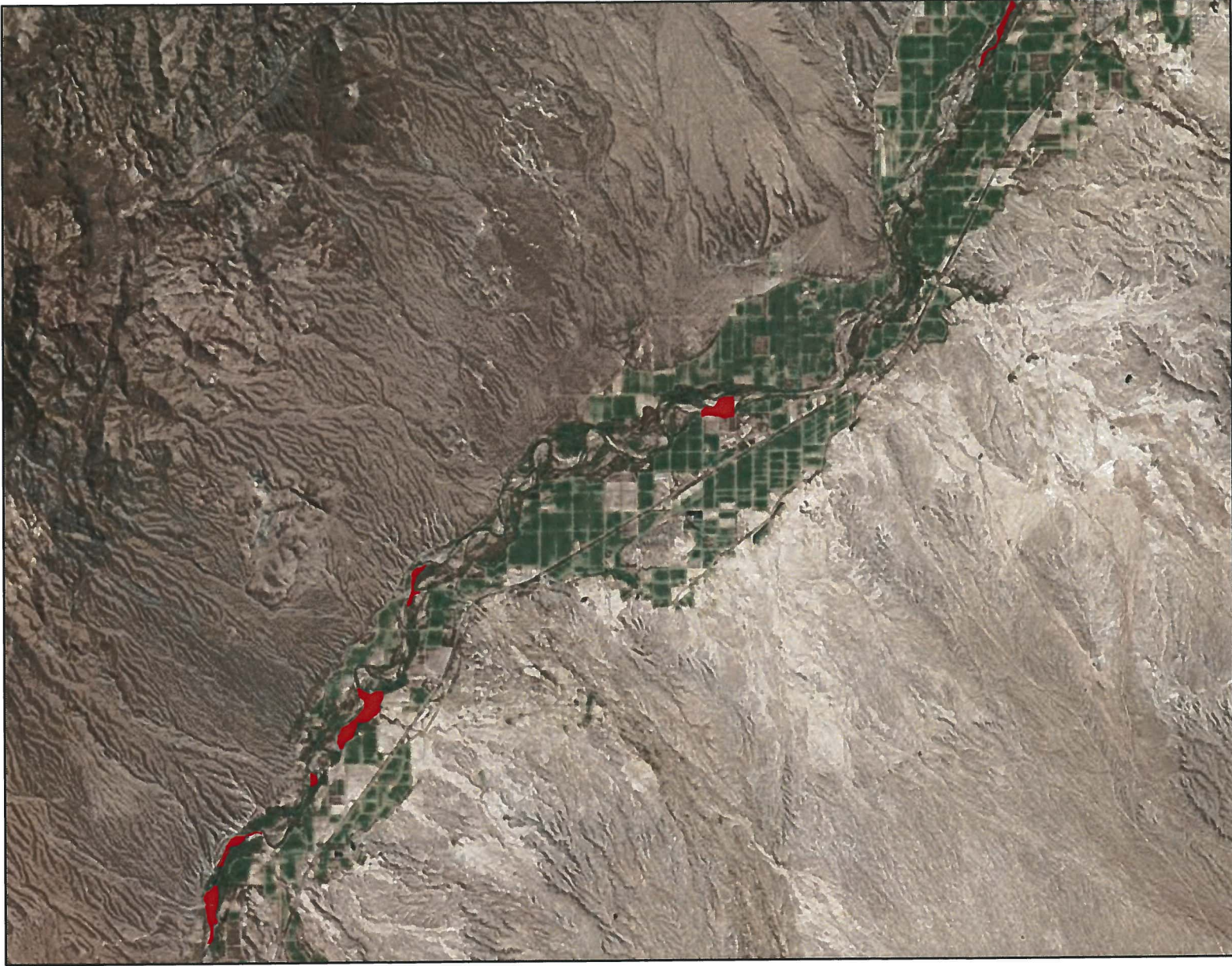
The GWP has a long history of productive collaboration with local landowners. In this phase of the project, additional landowners and their properties will be incorporated into the restoration effort. Starting with the ecohydrological assessment, high potential sites were targeted. These sites were then cross-referenced with parcel data acquired from the Graham County Assessor's Office to determine land ownership.

Landowners have been contacted, and the properties identified by the project maps represent sites where landowners have verbally agreed to participate. Formal, written landowner agreements allowing the GWP to access, treat, monitor, and maintain project sites will be provided to the grantor prior to any restoration work at these sites. Appropriate legal documents showing the title of the targeted property in the name of the collaborating landowner will be attached to the landowner agreement.

Site Code	Landownership	Access Status
R3	Ron Squire	Signed Agreement
	Gila Valley Irrigation District	Signed Agreement
R4	Bureau of Land Management	Verbal Agreement <i>Signed Agreement in process</i>
R8	Freeport-McMoRan Inc.	Signed Agreement
R9	Langley Eden Farms	Verbal Agreement <i>Signed Agreement in process</i>
R11	Freeport-McMoRan Inc.	Signed Agreement
R14	Freeport-McMoRan Inc.	Signed Agreement
R18S	Freeport-McMoRan Inc.	Signed Agreement

GWP Restoration Sites

Site Name	Treatment Area (Acres)	River Miles
R3	13	0.88
R4	20	0.86
R8	5	0.22
R9	15	1.07
R11	12	0.66
R14	18	1.07
R18 South	17	1.12



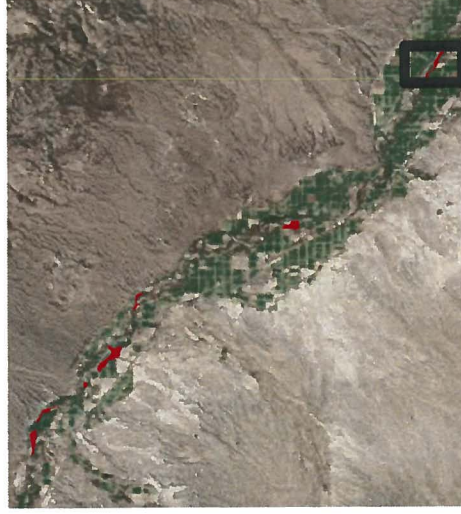
Site Name: R18 South

Planned Treatment Acres: 17

River Miles: 1.12

Land Ownership:

FREEPORT MCMORAN, INC.



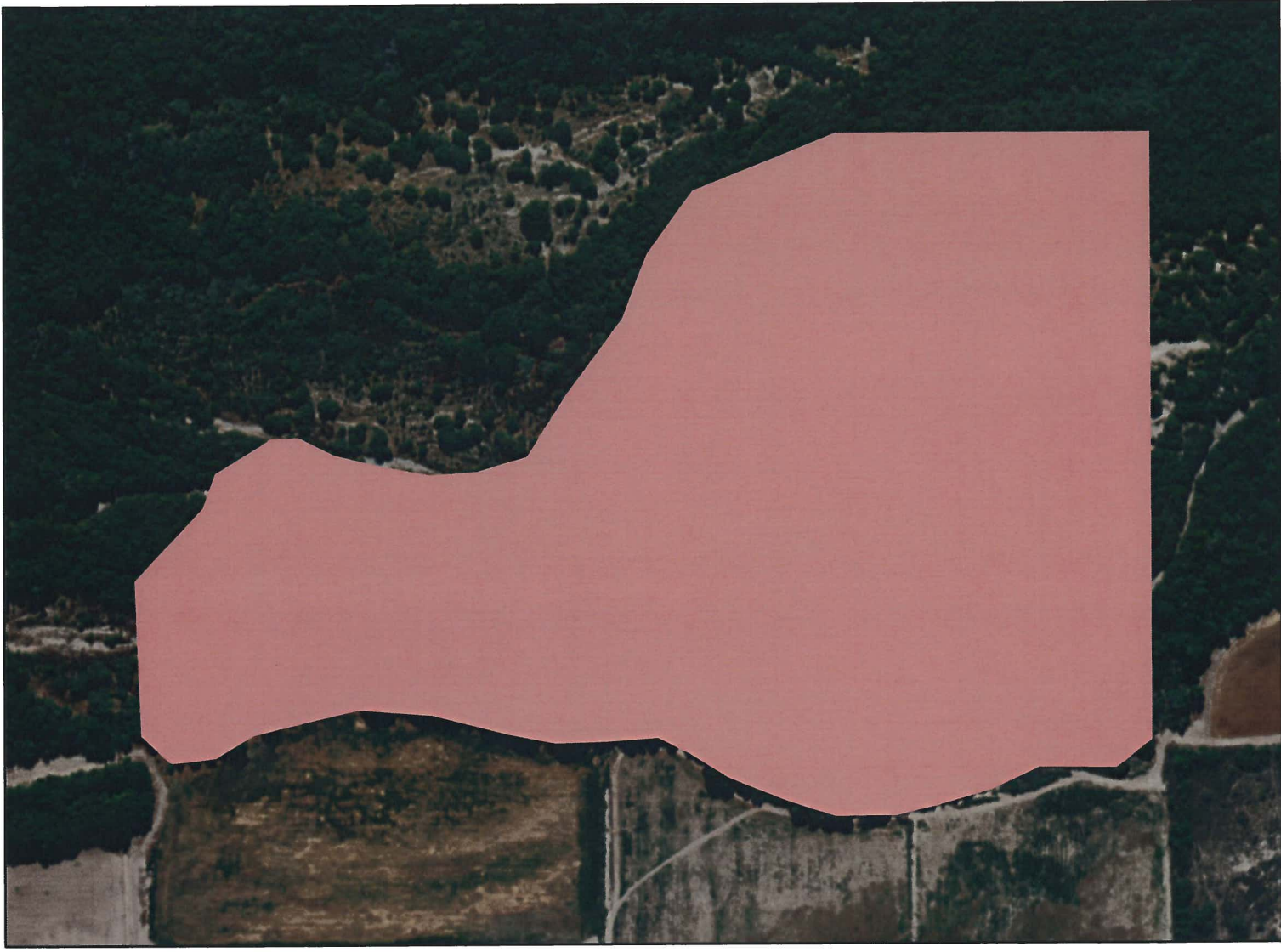
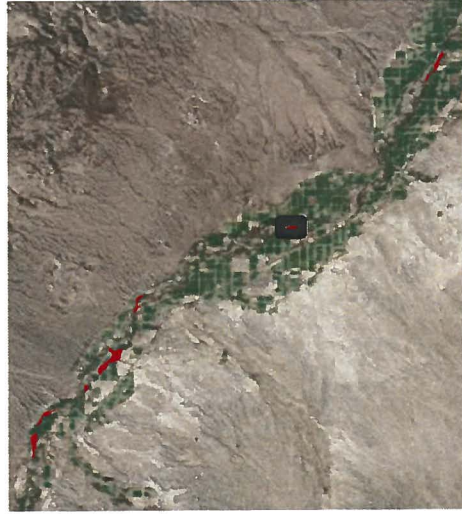
Site Name: R14

Planned Treatment Acres: 18

River Miles: 1.07

Land Ownership:

FREEPORT MCMORAN, INC.



Site Name: R11

Planned Treatment Acres: 12

River Miles: 0.66

Land Ownership:

FREEPORT MCMORAN, INC.




Site Name: R9

Planned Treatment Acres: 15

River Miles: 1.07

Land Ownership:

-  BUREAU OF LAND MANAGEMENT
-  FREEPORT MCMORAN, INC.
-  LANGLEY EDEN FARMS LLC



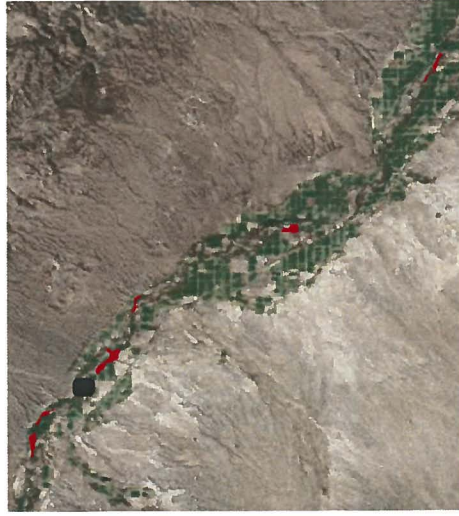
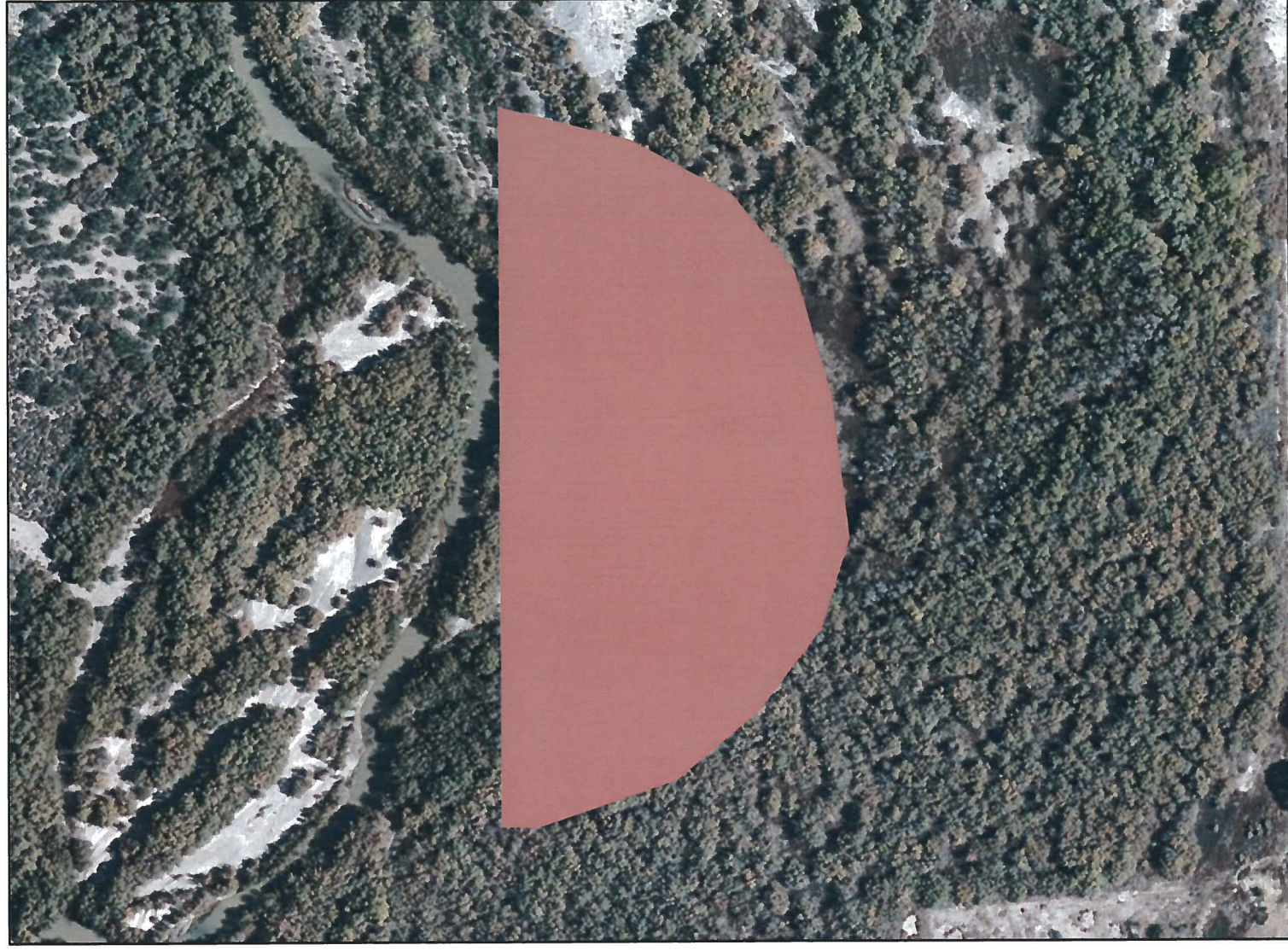
Site Name: R8

Planned Treatment Acres: 5

River Miles: 0.22

Land Ownership:

- BUREAU OF LAND MANAGEMENT
- FREEPORT MCMORAN, INC.



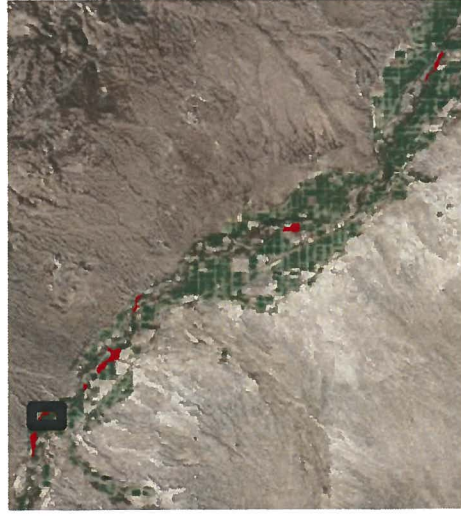
Site Name: R4

Planned Treatment Acres: 20

River Miles: 0.86

Land Ownership:

 BUREAU OF LAND MANAGEMENT



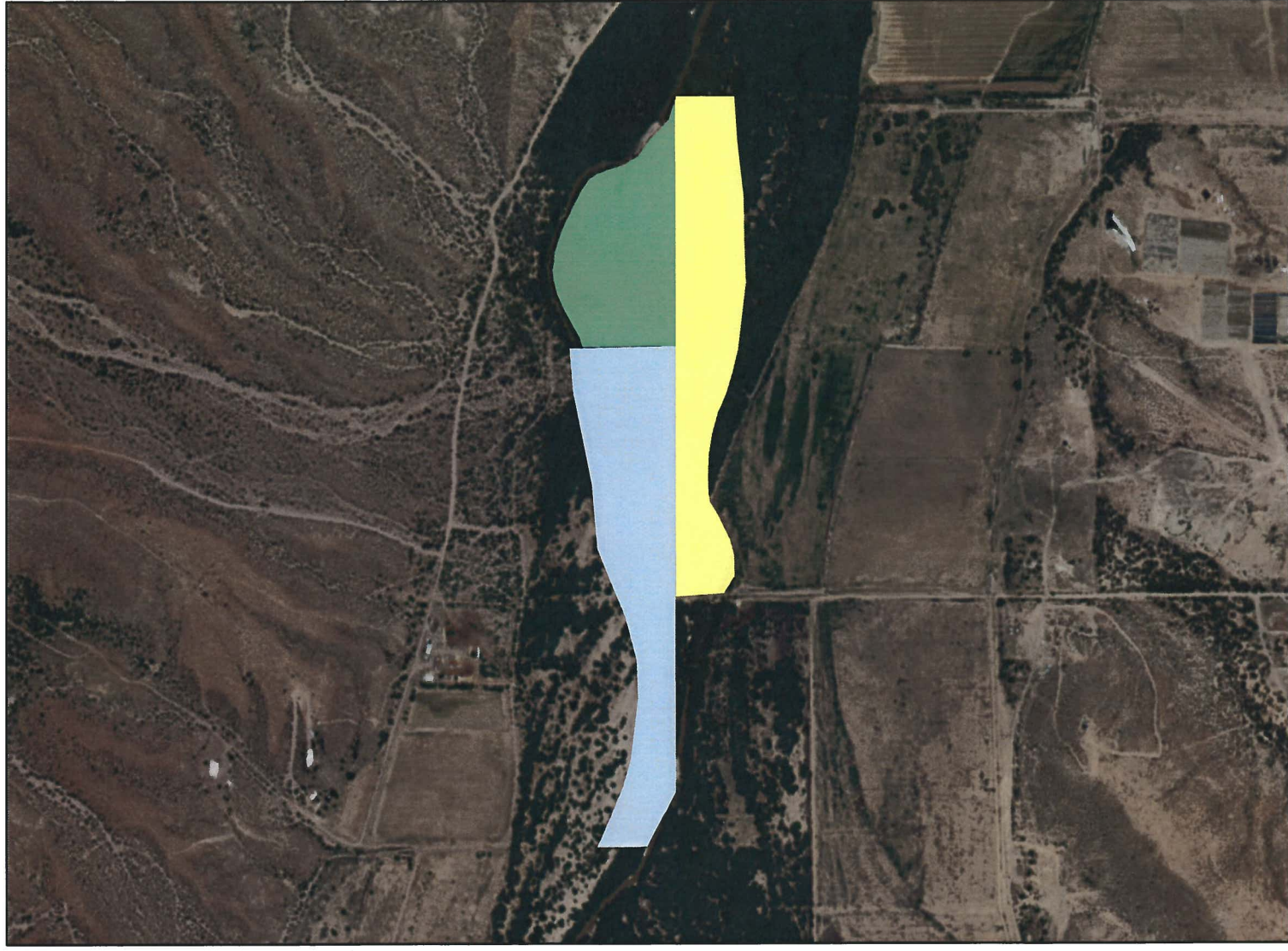
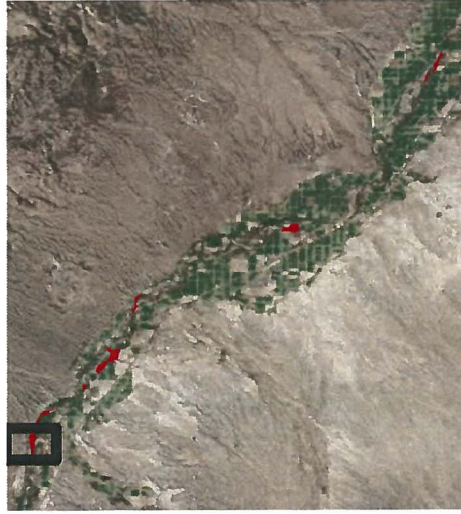
Site Name: R3

Planned Treatment Acres: 13

River Miles: 0.88

Land Ownership:

-  BUREAU OF LAND MANAGEMENT
-  GILA VALLEY IRRIGATION DISTRICT
-  SQUIRE RONALD PATRICK & MARY ELLA





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Safford Field Office
711 14th Avenue
Safford, Arizona 85546
(928) 348-4470



September 28, 2016

Arizona Water Protection Fund
3550 North Central Avenue
Phoenix, Arizona 85012

RE: FY 2017 Grant Application

Dear Grant Review Committee,

The Bureau of Land Management (BLM), Safford Field Office, has worked with the Gila Watershed Partnership for over 20 years to improve riparian management in the Gila Valley. Please accept this letter of support and commitment for the Gila Watershed Partnership's and their application for funding for their *River Restoration Through Hazardous Fuels and Invasive Species Removal* project. The Gila Watershed Partnership brings a wealth of natural resource management expertise and strong ties to Gila Watershed communities and landowners. The BLM will continue to support the project goals and objectives, and are confident that the Gila Watershed Partnership will be successful in their efforts at conserving wildlife habitat and water resources.

The BLM Safford Field Office has had a long and productive relationship with the Gila Watershed Partnership, working together on watershed improvement and community involvement projects. The project goals include improving regional and community awareness and appreciation of the rich ecological diversity in the Gila Watershed region. This effort will not only improve habitat for threatened and endangered species, but improve project and management efficiencies by working by working across landownership boundaries.

Sincerely,

Jeff Conn
Natural Resource Specialist

October 6, 2016

Arizona Water Protection Fund
3550 North Central Avenue
Phoenix, Arizona 85012

RE: FY 2017 Grant Application

Dear Grant Review Committee,

The Tamarisk Coalition (TC) is a non-profit organization whose mission it is to advance the restoration of riparian lands through collaboration, education and technical assistance. TC has partnered with the Gila Watershed Partnership (GWP) for a number of years to provide support in the technical aspects of riparian restoration and invasive plant management, and to assist the partnership in identifying and obtaining additional funding opportunities to support the on-the-ground work.

TC is pleased to provide this letter of support and commitment for the Gila Watershed Partnership and their application for funding for their *River Restoration Through Hazardous Fuels and Invasive Species Removal* project. The Gila watershed has special ecological characteristics that would greatly benefit from the proposed project. Diminishing invasive species and reducing fuel loads from the wetland and riparian zones and increasing native species viability will accomplish several goals including: 1) enhanced habitat for federally listed threatened and endangered species, 2) improved wildlife habitat, 3) improved ecological function, and 4) improving regional and community awareness and appreciation of the rich ecological diversity in the Gila Watershed region. This effort will also help catalyze the community to promote conservation ethics in the Upper Gila Watershed.

GWP possess a wealth of natural resource management expertise and strong ties to people in the watershed and the greater community. We support the project goals and objectives, and are confident that the Gila Watershed Partnership will be successful in their efforts.

Sincerely,



Stacy K. Beaugh
Executive Director



Restore. Connect. Innovate.

Tamarisk Coalition

P.O. Box 1907 · Grand Junction, CO 81502